



# Stereo Hanger



## Science Scoop

Sounds are made by **vibrations**. When you **tap** the hanger, it **vibrates** (moves back and forth). This makes the **air** around it vibrate. When these vibrations travel into your **ear**, you **hear** them as sound. If you listen to the hanger with your fingers in your ears, the vibrations travel through the string and into your ears. It sounds different because sound **travels differently** through **string (a solid)** than through **air (a gas)**.



## What You Need

- metal coat hanger
- two 12-inch pieces of string
- table

Try It  
Out!

- 1 **Tie** a piece of **string** to each corner of a **coat hanger**.
- 2 **Loop** the string around your index fingers.
- 3 **Swing** the hanger so it **taps** against the side of a table. What do you **hear**?
- 4 Put your **index fingers** (with the string attached) in your ears.
- 5 **Tap** the hanger again. Now what do you **hear**?

Sent in by Stephen H. of Germantown, TN



Now it's time for you to **experiment**. What happens if you **replace the string** with sewing thread or fishing line? Or, what happens if you **hang different objects** from the string, like a metal spoon or a sneaker? Choose **one thing** to change (that's the variable), and **predict** what you think will happen. Then **test it** and send your results to ZOOM.



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